

Claims

1. A method for a base site to facilitate CDMA-dispatch soft handoff comprising the steps of:
- 5 establishing a first outbound link for a dispatch call;
 transmitting the dispatch call via the first outbound link to a plurality of mobile stations (MSs);
 determining a first MS of the plurality of MSs should begin a soft handoff via a second outbound link with an adjacent base site; and
- 10 subsequent to the step of determining, indicating to at least one of the plurality of MSs in addition to the first MS the identity of the second outbound link and the identity of the adjacent base site.
2. The method of claim 1 further comprising the step of establishing
- 15 an inbound link with the first MS for the dispatch call.
3. The method of claim 2 wherein the step of determining comprises the step of receiving a request to handoff from the first MS via the inbound link.
- 20 4. The method of claim 2 wherein the inbound link comprises a low-rate inbound link used to communicate at least one of forward power control information, soft hand-off information, and reverse power information.
- 25 5. The method of claim 1 wherein the first outbound link and the second outbound link each comprises a full-rate CDMA outbound traffic channel.

6. The method of claim 1 wherein the step of indicating comprises the step of signaling in-band on the first outbound link the identity of the second outbound link and the identity of the adjacent base site.

5 7. The method of claim 1 wherein the step of indicating comprises the step of signaling via a paging channel the identity of the second outbound link and the identity of the adjacent base site.

10 8. The method of claim 7 wherein the step of signaling via a paging channel comprises the step of transmitting a broadcast page to convey the identity of the second outbound link and the identity of the adjacent base site.

15 9. The method of claim 1 further comprising the step of indicating the identity of the first MS with the identity of the second outbound link and the identity of the adjacent base site.

FOOTNOTES

10. A method for a mobile station (MS) to perform a CDMA-dispatch soft handoff comprising the steps of:

receiving a dispatch call via a first outbound link with a base site;

receiving an indication of the identity of a second outbound link with
5 an adjacent base site on which the dispatch call can be received and the identity of the adjacent base site; and

beginning a soft handoff by simultaneously receiving the dispatch call via the first outbound link and the second outbound link without signaling the base site regarding the soft handoff.

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11. The method of claim 10 wherein the MS does not have an inbound link to the first base site established for the dispatch call when beginning the soft handoff.

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12. The method of claim 10 wherein the step of receiving the indication comprises the step of receiving in-band signaling on the first outbound link that conveys the identity of the second outbound link and the adjacent base site.

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13. The method of claim 10 wherein the step of receiving the indication comprises the step of receiving via a paging channel the identity of the second outbound link and the adjacent base site.

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14. The method of claim 13 wherein the step of receiving the indication comprises the step of receiving a broadcast page that conveys the identity of the second outbound link and the adjacent base site.

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15. The method of claim 10 further comprising the step of transmitting a request to establish an inbound link with the adjacent base site for the dispatch call.

16. A base site comprising:

a transmitter; and

a controller, coupled to the transmitter, adapted to establish a first
outbound link for a dispatch call, adapted to instruct the transmitter to
5 transmit the dispatch call via the first outbound link to a plurality of mobile
stations (MSs), adapted to determining a first MS of the plurality of MSs
should begin a soft handoff via a second outbound link with an adjacent
base site, and adapted to instruct the transmitter to transmit a signal,
subsequent to determining, that indicates to at least one of the plurality of
10 MSs in addition to the first MS the identity of the second outbound link
and the identity of the adjacent base site.

17. The base site of claim 16 wherein the controller is further adapted
to establish an inbound link with the first MS for the dispatch call and
15 wherein the base site further comprises a receiver adapted to receive a
request to handoff from the first MS via the inbound link.

18. The base site of claim 17 wherein the inbound link comprises a
low-rate inbound link used to communicate at least one of forward power
20 control information, soft hand-off information, and reverse power
information.

19. The base site of claim 16 wherein the first outbound link and the
second outbound link each comprises a full-rate CDMA outbound traffic
25 channel.

20. A mobile station (MS) comprising:
a receiver; and
a processor, coupled to the receiver, adapted to instruct the receiver to receive a dispatch call via a first outbound link with a base site,
5 adapted to instruct the receiver to receive an indication of the identity of a second outbound link with an adjacent base site on which the dispatch call can be received and the identity of the adjacent base site, and adapted to begin a soft handoff without signaling the base site regarding the soft handoff by instructing the receiver to simultaneously receive the
10 dispatch call via the first outbound link and the second outbound link.
21. The MS of claim 20 wherein the MS does not have an inbound link to the first base site established for the dispatch call when the MS begins the soft handoff.
- 15 22. The MS of claim 20 wherein the MS further comprises a transmitter and wherein the processor is further adapted to instruct the transmitter to transmit a request to establish an inbound link with the adjacent base site for the dispatch call.

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